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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,545	07/22/2003	Kenichi Ishii	8032-1029	4870

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EXAMINER

LAM, DUNG LE

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/623,545	Applicant(s) ISHII, KENICHI	
	Examiner Dung Lam	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 89-99 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 89-99 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 97 cites, "A gateway of a location system for locating a target mobile terminal, wherein the gateway, responsive to a location request specifying the target mobile terminal and a type of location information from a client terminal, checks whether the network stores last known location information of the target mobile terminal and whether the stored last known location information satisfies a requested accuracy and a requested allowable age, **before or instead** of acquiring current location information."
2. Regarding claim 97 and 98, the claims seem to be incomplete and awkward because they only checks if a condition exists and then nothing is done as consequence of the condition. For examination purpose, the examiner will interpret the claims with the broadest reasonable interpretation that's similar to claim 92.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims **89 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over **3GPP171 (3GPP TS123.171 Functional Stage 2 description of Location services in UMTS, version 3.8.0)** in view of **Nowak** (US Pub. No.6968195).
2. Regarding claim **89**, **3GPP171** teaches a location system for locating a target mobile terminal, comprising: a client terminal (LCS client, section 5.5.1) for transmitting

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a location request specifying the target mobile terminal and location information including accuracy (request contains target UE identity and Quality of service information, section 5.5.1 and section 8.7.1.1 item 4, QoS such as accuracy); and a location network for estimating a location of the target mobile terminal in response to the location request from said client terminal, wherein said network conducts a privacy check (section 6.1, p. 20, section 8.7.1.1 item 5-7, 8.7.1.2 item 9) of the location request after said network has determined that said network stores a last known location of the target mobile terminal and the stored last known location satisfies the accuracy in the location request, and wherein, when a result of the privacy check is positive, said network provides the last known location in response to the location request and does not estimate the location of the target mobile terminal (section 8.7.1.2, the SRNC sends a location report immediately if the location accuracy within the QoS is satisfied which means no further location estimate is performed). However, **3G171** does not teach that the request specifies an allowable age and the step of checking whether if a requested allowable age of location information satisfied the specified condition. In an analogous art, **Nowak** teaches the concept of not only specifying the accuracy as a QoS parameter of a location request but also the allowable age to tailor to the customers' specific needs and budget (C2 L41- C3 L39). Nowak further teaches that if a location that falls within the specified allowable age is available, the network skip the step of searching for a new source performing the location estimation (C3 L40-58, C15 L15-42). Because the more accurate or fresh a location estimation is, the higher the cost. Therefore, it would have been obvious for one of ordinary skill in the art at the time of

the invention to combine **3G171**'s location system with Nowak's specifying a QoS parameter of allowable age to enable the user the flexibility of acquiring the type of location that is tailored to the users' specific needs and affordable budget.

3. Regarding claim **90**, **3GPP171** and **Nowak** teach location system of claim 89, wherein **3GPP171** further teaches the location request specifies that a current location of the target mobile terminal is desired (see section 8.7.1.1 page 31-33), and wherein said network privacy check of the location request after said network has determined that the current location of the target mobile terminal is available (section 8.7.1.3 page 33), and wherein, when a result of the privacy check is positive, said network provides the current location of the target mobile terminal (section 8.7.1.1-2 page 32).

4. Regarding claim **91**, **3GPP171** teaches a location system for locating a target mobile terminal, comprising: a) a client terminal (LCS client) for transmitting a location request specifying the target mobile terminal and a type of location information (type of location, section 5.5.1, p.20); and a location network that, responsive to said location request from said client terminal (Section 6, p. 20), performs a privacy check terminal if the network stores a last known location information of the target mobile and the stored last known location information satisfies a requested accuracy (section 8.7.1.3 page 33), and skips location estimation processing if the result of the privacy check satisfies one or more specified conditions (section 8.7.1.2, the SRNC sends a location report immediately if the location accuracy within the QoS is satisfied.) However, **3G171** does not teach that the request specifies an allowable age and the step of checking whether if a requested allowable age of location information satisfied the specified condition. In

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an analogous art, **Nowak** teaches the concept of not only specifying the accuracy as a QoS parameter of location request but also the allowable age to tailor to the customers' specific needs and budget (C2 L41- C3 L39) and if a location that falls within the specified allowable age is available, then the step of looking for another network source to perform location estimation is skipped (C3 L40-58, C15 L15-42). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine 3G171 location system with Nowak's QoS parameter of allowable age to enable the user the flexibility of acquiring the type of location that fits his/her specific needs and budget since the more accurate or fresh/new a location is the more expensive it is.

5. Regarding claim **92**, 3G171 teaches a location system for locating a target mobile terminal, comprising: a client terminal (LCS client) for transmitting a location request specifying the target mobile terminal and a type of location information (type of location, section 5.5.1, p.20); and a location network that (Section 6, p. 20), responsive to said location request from said client terminal, checks whether the network stores last known location information of the target mobile terminal if the type of location information specifies last known or current location (p. 35, section 8.7.2.5.1-8.7.2.5.3), check if the network stores the last known location information of the target mobile terminal (p. 35, section 8.7.2.5.1-8.7.2.5.3) and the stored last known location information satisfies a requested QoS such as accuracy and performs a privacy check (item 5-7, p. 35, section 8.7.1.1), and skips location estimation processing if the result of the privacy check satisfies one or more specified conditions (section 8.7.1.2, the SRNC

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sends a location report immediately if the location accuracy within the QoS is satisfied.)

3G171 further teaches that the last known location is coupled with a time stamp of a location which is similar to the age of a location (p. 35, section 8.7.2.5.2). However, **3G171** does not teach the step of checking whether if a requested allowable age of location information is available or if the stored last known location information satisfies a requested allowable age. In an analogous art, **Nowak** teaches the concept of not only specifying the accuracy as a QoS parameter of location request but also the age to tailor to the customers' specific needs and budget (C2 L41- C3 L39) and if a location that falls within the specified allowable age is available, further search for a new source for the location is skipped (C3 L40-58, C15 L15-42). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine 3G171 location system with Nowak's QoS parameter of allowable age to enable the user the flexibility of acquiring the type of location that fits his/her specific needs and budget since the more accurate or fresh/new a location is the more expensive it is.

6. Regarding claim **93**, **3G171** and **Nowak** teach the location system of claim 92, wherein 3G171 further teaches the location estimation processing acquires current location information (if QoS is satisfied, SRNC sends a location report immediately, otherwise, it use the current cell location which is interpreted as location estimation of current location, section 8.7.1.2, item 9).

7. Regarding claim **94**, **3G171** teaches a gateway of a location system for locating a target mobile terminal, wherein the gateway (section 8.7.1.1) is responsive to a location request specifying the target mobile terminal and a type of location information from a

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client terminal (section 5.5.1), wherein the gateway performs a privacy check (Section 6.1 p. 20 and 21). **3G171** further teaches a step of checking whether and if the last known location information of the target mobile terminal is stored and the stored last known location information satisfies a requested accuracy (p. 35, section 8.7.2.5.1-8.7.2.5.3). However, **3G171** does not teach the step of checking whether if a requested allowable age of location information is available or if the stored last known location information satisfies a requested allowable age. In an analogous art, **Nowak** teaches the concept of not only specifying the accuracy as a QoS parameter of location request but also the age to tailor to the customers' specific needs and budget (C2 L41- C3 L39) and if a location that falls within the specified allowable age is available, further search for a new source for the location is skipped (C3 L40-58, C15 L15-42). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine 3G171 location system with Nowak's QoS parameter of allowable age to enable the user the flexibility of acquiring the type of location that fits his/her specific needs and budget since the more accurate or fresh/new a location is the more expensive it is

8. Regarding claim **95**, it has similar limitations as claim 94, therefore, it is rejected for the same reasons as claim 94.

9. Regarding claim **96**, it has similar limitations as claim 94, therefore, it is rejected for the same reasons as claim 94.

10. Regarding claims **97-98**, they have similar limitations as claim 92, therefore, they are rejected for the same reasons as claim 92.

11. Regarding claim **99, 3G171 and Nowak** teach the gateway of claim 97, wherein the gateway transmits said stored last known location information if the gateway stores last known location information of the target mobile terminal and the stored last known location information satisfies the requested accuracy (3G171, if QoS, e.g. accuracy, can be satisfied, then location report is sent immediately, otherwise further steps is performed for the location estimation, section 8.7.1.3) and the requested allowable age and acquires current location information if the gateway does not store last known location information of the target mobile terminal or the stored last known location information does not satisfy the requested accuracy and the requested allowable age .

Response to Arguments

3. Since the amendment filed on 6/12/06 is in noncompliance with 1.111(b), the supplementary amendment/reply filed on 6/30/06 will not be entered because the supplementary reply is not limited to the conditions below (see MEP 714.02 [R-3]).

- (A) Cancellation of a claim(s);
 - (B) Adoption of the examiner suggestion(s);
 - (C) Placement of the application in condition for allowance;
 - (D) Reply to an Office requirement made after the first reply was filed;
 - (E) Correction of informalities (e.g., typographical errors); or
 - (F) Simplification of issues for appeal.
- (ii) A supplemental reply will be entered if the supplemental reply is filed within the period during which action by the Office is suspended under § 1.103(a) or (c).<

4. Applicant's arguments with respect to claim 89-99 have been considered but are moot in view of the new ground(s) of rejection.

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5. As seen from above rejection, **3G171** discloses the concept of performing privacy check in a location request is known. **Nowak** has been cited as the secondary reference that teaches the concept of specifying the accuracy and allowable age in a location request as QoS parameters to tailor to users' specific needs. Therefore, the claimed invention is unpatentable over **3G171** and **Nowak**. The examiner notes that the apparatus claims do not contain any specific structures and instead contain only functional language. The examiner suggests structures to be incorporated into the apparatus claims to define structural functional interrelationships or perhaps modify the claims to method claims that contain steps.

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Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Lam whose telephone number is (571) 272-6497. The examiner can normally be reached on M - F 9 - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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SUPERVISORY PRIMARY EXAMINER